

# STudent REsearch TalkS (StReTs)

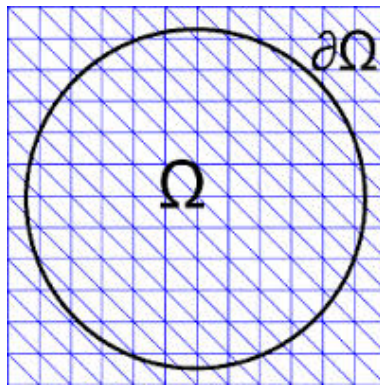
Mason Experimental Geometry Lab (MEGL)

## Introduction to Geometry of Finite Element Methods for Flow Problems

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### Abstract

In this talk we introduce the idea of the finite element method for solving partial differential equations, in particular the two-phase Navier-Stokes equation. We then discuss various methods for handling the geometry of the discretization of the domain: Arbitrary Lagrangian Eulerian, Unfitted Nitsche, and ghost penalties. Based off of a talk by Sven Groß at the 2014 FoMICS Winter School.

Date: Friday, 5 December 2014

Time: 2:30pm–3:30pm

Place: Seminar Room, Fourth Floor, Exploratory Hall

**Pizza and soda will be served at the presentation.**

For further information or for special accommodations, please contact Sean Lawton via email at [seanlawton@gmail.com](mailto:seanlawton@gmail.com) or drop by the MEGL.